

## THE ASTROPHYSICAL JOURNAL LETTERS

## CONTENTS OF VOLUME 523, PART 2

1999 SEPTEMBER 20, NUMBER 1

	L1 Page
A NEW CALCULATION OF THE RECOMBINATION EPOCH <i>S. Seager, D. D. Sasselov, and D. Scott</i>	L1
THE BLANDFORD-ZNAJEK MECHANISM AND THE EMISSION FROM ISOLATED ACCRETING BLACK HOLES <i>Philip J. Armitage and Priyamvada Natarajan</i>	L7
X-RAY SPECTRAL VARIABILITY OF PKS 2005-489 DURING THE SPECTACULAR 1998 NOVEMBER FLARE <i>Eric S. Perlman, Greg Madejski, John T. Stocke, and Travis A. Rector</i>	L11
THE PROPERTIES OF THE RELATIVISTIC IRON K-LINE IN NGC 3516 <i>K. Nandra, I. M. George, R. F. Mushotzky, T. J. Turner, and T. Yaqoob</i>	L17
A NOVEL MECHANISM FOR THE FORMATION OF ELECTRON-POSITRON OUTFLOW FROM HOT ACCRETION DISKS <i>Tatsuya Yamasaki, Fumio Takahara, and Masaaki Kusunose</i>	L21
A NEW CULPRIT IN THE SECOND-PARAMETER PROBLEM IN THE SCULPTOR DWARF SPHEROIDAL GALAXY? <i>Denise Hurley-Keller, Mario Mateo, and Eva K. Grebel</i>	L25
DETECTION OF CIRCULAR POLARIZATION IN THE GALACTIC CENTER BLACK HOLE CANDIDATE SAGITTARIUS A* <i>Geoffrey C. Bower, Heino Falcke, and Donald C. Backer</i>	L29
DETECTION OF POLARIZATION IN THE AFTERGLOW OF GRB 990510 WITH THE ESO VERY LARGE TELESCOPE <i>R. A. M. J. Wijers, P. M. Vreeswijk, T. J. Galama, E. Rol, J. van Paradijs, C. Kouveliotou, T. Giblin, N. Masetti, E. Palazzi, E. Pian, F. Frontera, L. Nicastro, R. Falomo, P. Soffitta, and L. Piro</i>	L33
WHERE IS SGR 1806-20? <i>K. Hurley, C. Kouveliotou, T. Cline, E. Mazets, S. Golenetskii, D. D. Frederiks, and J. van Paradijs</i>	L37
BEAMS AND CONES FROM ALIGNED ROTATORS <i>B. J. Eastlund and B. Miller</i>	L41
A NEW BURSTING X-RAY TRANSIENT: SAX J1750.8-2900 <i>L. Natalucci, R. Cornelisse, A. Bazzano, M. Cocchi, P. Ubertini, J. Heise, J. J. M. in 't Zand, and E. Kuulkers</i>	L45
SPIN-DOWN OF PULSATIONS IN THE COOLING TAIL OF AN X-RAY BURST FROM 4U 1636-53 <i>Tod E. Strohmayer</i>	L51
CAN DEFLAGRATION-DETONATION TRANSITIONS OCCUR IN TYPE Ia SUPERNOVAE? <i>J. C. Niemeyer</i>	L57
CONSTRAINTS ON THE TIME DELAY BETWEEN NUCLEOSYNTHESIS AND COSMIC-RAY ACCELERATION FROM OBSERVATIONS OF $^{56}\text{Ni}$ AND $^{56}\text{Co}$ <i>M. E. Wiedenbeck, W. R. Binns, E. R. Christian, A. C. Cummings, B. L. Dougherty, P. L. Hink, J. Klarmann, R. A. Leske, M. Lijowski, R. A. Mewaldt, E. C. Stone, M. R. Thayer, T. T. von Rosenvinge, and N. E. Yanasak</i>	L61
DISCOVERY OF 715 SECOND PULSATIONS FROM THE FAINT X-RAY SOURCE AX J170006-4157 <i>Ken'ichi Torii, Mutsumi Sugizaki, Takayoshi Kohmura, Takao Endo, and Fumiaki Nagase</i>	L65
SPIN-DOWN OF THE 65 MILLISECOND X-RAY PULSAR IN THE SUPERNOVA REMNANT G11.2-0.3 <i>Ken'ichi Torii, Hiroshi Tsunemi, Tadayasu Dotani, Kazuhisa Mitsuda, Nobuyuki Kawai, Kenzo Kinugasa, Yoshitaka Saito, and Shinpei Shibata</i>	L69
INTERPRETATION OF ~35 Hz QPO IN THE ATOLL SOURCE 4U 1702-42 AS A LOW BRANCH OF THE KEPLERIAN OSCILLATIONS UNDER THE INFLUENCE OF THE CORIOLIS FORCE <i>Vladimir Osherovich and Lev Titarchuk</i>	L73
CONSTRAINING THE COSMIC ABUNDANCE OF STELLAR REMNANTS WITH MULTI-TeV GAMMA RAYS <i>David S. Graff, Katherine Freese, Terry P. Walker, and Marc H. Pinsonneault</i>	L77
DETECTION OF HARD X-RAYS FROM A CLASS I PROTOSTAR IN THE HH 24-26 REGION IN THE ORION MOLECULAR CLOUD <i>H. Ozawa, F. Nagase, Y. Ueda, T. Dotani, and M. Ishida</i>	L81
A BEPPoSAX STUDY OF THE PULSATING TRANSIENT X0115+63: THE FIRST X-RAY SPECTRUM WITH FOUR CYCLOTRON HARMONIC FEATURES <i>A. Santangelo, A. Segreto, S. Giarrusso, D. Dal Fiume, M. Orlandini, A. N. Parmar, T. Oosterbroek, T. Bulik, T. Mihara, S. Campana, G. L. Israel, and L. Stella</i>	L85
LASER SPECTROSCOPY OF THE CARBON CHAINS $\text{HC}_n\text{H}$ AND $\text{HC}_n\text{H}$ <i>C. D. Ball, M. C. McCarthy, and P. Thaddeus</i>	L89

CORONAL HEATING BY MAGNETOHYDRODYNAMIC TURBULENCE DRIVEN BY REFLECTED LOW-FREQUENCY WAVES <i>W. H. Matthaeus, G. P. Zank, S. Oughton, D. J. Mullan, and P. Dmitruk</i>	L93
ERRATUM	
IS SGR 1900+14 A MAGNETAR? <i>D. Marsden, R. E. Rothschild, and R. E. Lingenfelter</i>	L97
1999 OCTOBER 1, NUMBER 2	
DISTINGUISHING BETWEEN COLD DARK MATTER AND MODIFIED NEWTONIAN DYNAMICS: PREDICTIONS FOR THE MICROWAVE BACKGROUND <i>Stacy S. McGaugh</i>	L99 Page
FORMATION AND DISRUPTION OF COSMOLOGICAL LOW-MASS OBJECTS <i>Ryoichi Nishi and Hajime Susa</i>	L103
YOUNG GALAXIES: WHAT TURNS THEM ON? <i>T. S. Kolatt, J. S. Bullock, R. S. Somerville, Y. Sigad, P. Jonsson, A. V. Kravtsov, A. A. Klypin, J. R. Primack, S. M. Faber, and A. Dekel</i>	L109
GAMMA-RAY BURST ENERGETICS <i>Pawan Kumar</i>	L113
LUMINOSITIES AND SPACE DENSITIES OF GAMMA-RAY BURSTS <i>Maarten Schmidt</i>	L117
OPTICAL AND RADIO OBSERVATIONS OF THE AFTERGLOW FROM GRB 990510: EVIDENCE FOR A JET <i>F. A. Harrison, J. S. Bloom, D. A. Frail, R. Sari, S. R. Kulkarni, S. G. Djorgovski, T. Axelrod, J. Mould, B. P. Schmidt, M. H. Wieringa, R. M. Wark, R. Subrahmanyam, D. McConnell, P. J. McCarthy, B. E. Schaefer, R. G. McMahon, R. O. Markze, E. Firth, P. Soffitta, and L. Amati</i>	L121
HIGH-RESOLUTION THREE-DIMENSIONAL SIMULATIONS OF RELATIVISTIC JETS <i>M. A. Aloy, J. M. Ibáñez, J. M. Martí, J.-L. Gómez, and E. Müller</i>	L125
THE BROAD Fe K-LINE PROFILE IN NGC 4151 <i>Jun-Xian Wang, You-Yuan Zhou, and Ting-Gui Wang</i>	L129
ON THE FORMATION OF BOXY AND DISKY ELLIPTICAL GALAXIES <i>Thorsten Naab, Andreas Burkert, and Lars Hernquist</i>	L133
$\Omega_m$ FROM THE TEMPERATURE-REDSHIFT DISTRIBUTION OF EMSS CLUSTERS OF GALAXIES <i>Megan Donahue and G. Mark Voit</i>	L137
IONIZED GAS IN DAMPED Ly $\alpha$ SYSTEMS AND ITS EFFECTS ON ELEMENTAL ABUNDANCE STUDIES <i>J. Christopher Howk and Kenneth R. Sembach</i>	L141
THE YELLOW HYPERGIANTS HR 8752 AND $\rho$ CASSIOPEIAE NEAR THE EVOLUTIONARY BORDER OF INSTABILITY <i>G. Israelian, A. Lobel, and M. R. Schmidt</i>	L145
HUBBLE SPACE TELESCOPE SPACE TELESCOPE IMAGING SPECTROGRAPH CORONAGRAPHIC IMAGING OF THE HERBIG AE STAR AB AURIGAE <i>C. A. Grady, B. Woodgate, F. C. Bruhweiler, A. Boggess, Philip Plait, Don J. Lindler, M. Clampin, and P. Kalas</i>	L151
CRITERIA FOR FRAGMENTATION OF ROTATING ISOTHERMAL CLOUDS REVISITED <i>Toru Tsuribe and Shu-ichiro Inutsuka</i>	L155
THE D/H RATIO IN INTERSTELLAR GAS TOWARD G191-B2B <i>M. S. Sahu, W. Landsman, F. C. Bruhweiler, T. R. Gull, C. A. Bowers, D. Lindler, K. Feggans, M. A. Barstow, I. Hubeny, and J. B. Holberg</i>	L159
CO DEPLETION IN THE STARLESS CLOUD CORE L1544 <i>P. Caselli, C. M. Walmsley, M. Tafalla, L. Dore, and P. C. Myers</i>	L165
PARALLAX OF PSR J1744–1134 AND THE LOCAL INTERSTELLAR MEDIUM <i>M. Toscano, M. C. Britton, R. N. Manchester, M. Bailes, J. S. Sandhu, S. R. Kulkarni, and S. B. Anderson</i>	L171
ROTATIONAL SIGNATURE AND POSSIBLE $r$ -MODE SIGNATURE IN THE GALLEX SOLAR NEUTRINO DATA <i>P. A. Sturrock, J. D. Scargle, G. Walther, and M. S. Wheatland</i>	L177
MIGRATION OF ZONAL FLOWS DETECTED USING MICHELSON DOPPLER IMAGER $f$ -MODE FREQUENCY SPLITTINGS <i>J. Schou</i>	L181
A TWO-DIMENSIONAL, SELF-CONSISTENT MODEL OF GALACTIC COSMIC RAYS IN THE HELIOSPHERE <i>V. Florinski and J. R. Jokipii</i>	L185
INSTRUCTIONS TO AUTHORS OF LETTERS, AND RECENT LETTERS ABSTRACTS AND OTHER BIBLIOGRAPHICAL SERVICES	<i>Inside Back Cover</i>
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	<i>Back Cover</i>

